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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/670,089

09/24/2003

Chun Tsun Chen

14603

6325

7590

08/09/2005

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625 SLATERS LANE
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ALEXANDRIA, VA 22314-1176

EXAMINER

TRAN, THUY V

ART UNIT

PAPER NUMBER

2821

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No.	Applicant(s)	
	10/670,089	CHUN TSUN CHEN	
	Examiner	Art Unit	
	Thuy V. Tran	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE filed 07/18/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/18/2005</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a response to the Applicant's Request for Continued Examination (RCE) filed on July 18th, 2005. In virtue of this filing, claim 4 was previously canceled; claim 7 is newly added; and thus, claims 1-3 and 5-7 are now presented in the instant application.

Request for Continued Examination entered

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/18/2005 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Crane et al. (U.S. Patent No. 6,164,797).

With respect to claim 1, Crane et al. discloses, in Figs. 1 and 2, a compact fluorescent lamp holder comprising (1) a plurality of sockets [12, 14, 16], each of which is adapted to receive a compact fluorescent lamp (see col. 2, lines 21-24) having only one electrical connection end (only one connection end for each wire [30, 32, 34] shown in Fig. 1), (2) a ballast mechanism [24, 26, 40] comprising a ballast circuit [24] therein (see col. 2, lines 27-29), and (3)

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a plurality of electric wires [30, 32, 34] connecting the sockets to the ballast mechanism [24, 26, 40] so that the compact fluorescent lamps when mounted in each of the sockets [12, 14, 16] will be turned on when an AC power is provided to the ballast circuit (via feed wires 28; see Fig. 1; col. 1, lines 21-28), wherein each said compact fluorescent lamp is supported by a single one of said respective sockets (see col. 2, lines 21-24) and electrically connected to said ballast mechanism [24, 26, 40] solely by said one electrical connection end (of each wire [30, 32, 34]; see bottom part of Fig. 1), wherein said ballast mechanism supports said plurality of sockets (via [26, 40]; see Figs. 1-2), and wherein said ballast mechanism [24, 26, 40] is mounted to a lighting fixture (via [26, 40]; see Fig. 1; col. 1, line 13).

With respect to claim 2, Figs. 1 and 2 of Crane et al. show that the ballast mechanism [24, 26, 40] comprises a shell [40] (see Fig. 2) for accommodating the ballast circuit therein, and the shell comprises a fastening mechanism (narrow openings shown in [26]; see Fig. 1) for non-electrically fastening the shell to the lighting fixture.

With respect to claim 3, Figs. 1 and 2 of Crane et al. show that the sockets [12, 14, 16] are connected to the ballast mechanism [24, 26, 40] by the plurality of wires [30, 32, 34] only (see Fig. 1).

With respect to claim 5, Figs. 1 and 2 of Crane et al. show that the shell [40] is a polygonal hollow body, and the fastening mechanism comprises a plurality of locating slots (narrow openings in [26]; see Fig. 1) at an edge thereof.

With respect to claim 7, Crane et al. discloses, in Figs. 1 and 2, a lighting fixture comprising (1) a plurality of compact fluorescent lamps [12, 14, 16] having only one electrical connection end (which is at ballast [24]; see Fig. 1), and (2) one-to-many compact fluorescent

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lamp holder comprising (a) a plurality of sockets [12, 14, 16], each of which is adapted to receive one of the compact fluorescent lamps (see col. 2, lines 21-24), (b) a ballast mechanism [24, 26, 40] comprising a ballast circuit [24] therein (see col. 2, lines 27-29), and (c) a plurality of electric wires [30, 32, 34] connecting the sockets to the ballast mechanism [24, 26, 40] so that the compact fluorescent lamps mounted in the sockets [12, 14, 16] will be turned on when an AC power is provided to the ballast circuit (via feed wires 28; see Fig. 1; col. 1, lines 21-28), wherein each said compact fluorescent lamp is supported by a single one of said respective sockets (see col. 2, lines 21-24) and electrically connected to said ballast mechanism [24, 26, 40] solely by said one electrical connection end (of each wire [30, 32, 34]; see bottom part of Fig. 1), wherein said ballast mechanism supports said plurality of sockets (via [26, 40]; see Figs. 1-2), and wherein said ballast mechanism [24, 26, 40] is mounted to a lighting fixture (via [26, 40]; see Fig. 1; col. 1, line 13).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Crane et al. (U.S. Patent No. 6,164,797) in view of Chang (U.S. Patent No. 6,194,840).

With respect to claim 6, Crane et al. discloses all of the claimed subject matter, as expressly recited in claim 1, except for specifying that the ballast circuit comprises an EMI circuit, a rectifying and filter circuit, an inverter circuit, and an output circuit, wherein the EMI

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circuit is configured to be connected with a source of AC power, the rectifying and filter circuit is connected to the EMI circuit and provides a DC current to the inverter circuit, and the inverter circuit and the output circuit provide a high voltage for activating the compact fluorescent lamps and a high frequency AC current to the compact fluorescent lamps for maintaining their stable lighting.

Chang discloses, in Fig. 2, a ballast circuit comprising an EMI circuit [L1, C1], a rectifying and filter circuit [D1, D2, D3, D4, C3], an inverter circuit [Q1, Q2], and an output circuit [17, T1, C4], wherein the EMI circuit [L1, C1] is configured to be connected with an AC power, the rectifying and filter circuit [D1, D2, D3, D4, C3] is connected to the EMI circuit and provides a DC current to the inverter circuit [Q1, Q2], and the inverter circuit and the output circuit provide a high voltage for activating the compact fluorescent lamps and a high frequency AC current to the compact fluorescent lamps for maintaining their stable lighting (see col. 3, line 56 – col. 4, line 54).

It would have been obvious to one of ordinary skills in the art at the time of the invention to modify the ballast circuit of Crane et al. by reconfiguring the ballast circuit components/parts of Crane et al. in a way taught by Chang for an advantageous lamp operation since Chang's ballast circuit arrangement is operated at low cost and provides a constant output voltage even if the lamp or lamps is/are extinguished or removed (see col. 1, lines 56-61 and col. 2, lines 12-14).

Remarks and conclusion

6. Applicant's arguments in the amendment filed on July 18th, 2005 have been fully considered but they are not persuasive.

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With respect to the Applicant's arguments on amended claim 1 and newly added claim 7 in lines 5-6 in the first paragraph of part (1) at page 4 of the amendment, the Examiner respectfully disagrees with the Applicant's statement, which is "The fluorescent lamps of Crane are supported and electrically connected in conventional fashion at two ends by two sockets". Fig. 1 of Crane et al. clearly shows that the fluorescent lamps are each supported and electrically connected at one end by one socket (or holder). Applicant is noted that Fig. 3 is not recited by the Examiner with respect to any of the rejections set forth in this Office Action. See Section "Claim Rejections - 35 USC § 102" for details. Therefore, claims 1-3, 5, and 7 are rejected as being anticipated by the teachings of Crane et al..

With respect to the Applicant's arguments on amended claim 6 in the first paragraph at page 5 of the amendment, two points are noted. First, the Examiner has addressed all the details in Section "Claim Rejections - 35 USC § 102" in regard to the teachings of Crane et al. in which Crane et al. clearly discloses that the fluorescent lamps are each supported and electrically connected at one end by a single respective socket, and the single sockets in turn being supported by the ballast which is mounted to a fixture. Second, it is agreed that Chang is completely silent as to the construction of the socket, its connection to the ballast, and mounting of the ballast. However, Applicant should be noted that a separate modification of the ballast of Crane et al. could be appropriately made based on the advantages of the ballast circuit configuration taught by Chang. Therefore, claim 6 remains rejected as being unpatentable over the combined teachings of Crane et al. and Chang (see "Claim Rejections – 35 UCS §103" for details).

Citation of relevant prior art

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7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prior art Miller et al. (U.S. patent No. 3,733,482) discloses a luminaire with vertically oriented U-shaped lamp.

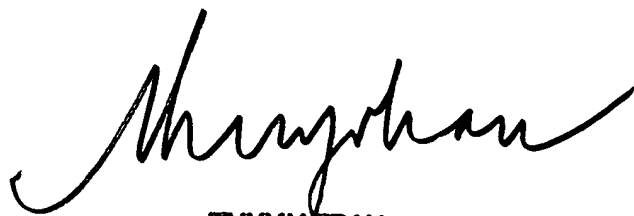
Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy V. Tran whose telephone number is (571) 272-1828. The examiner can normally be reached on M-F (8:00 AM -5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

08/08/2005



**THUY V. TRAN
PRIMARY EXAMINER**